

Applicant: D. Eyles  
For: System and Method for Automatically Executing  
Decisional Rule

Sub F1 1. A method for automatically evaluating a decisional rule containing a task and a condition which must be fulfilled before the task can be performed and for automatically performing the task when the condition is fulfilled comprising:

- entering said decisional rule into computing means;
- compiling said decisional rule to parse said condition;
- providing automatic and continuing iterative evaluations of whether said condition is fulfilled until said condition is fulfilled once;
- automatically performing said task when said condition is fulfilled once; and
- resuming further processing only after said condition is fulfilled once.

2. A method for automatically executing a decisional rule containing a task and a condition which must be fulfilled before the task can be performed and for automatically performing the task whenever the condition is fulfilled comprising:

- entering said decisional rule into computing means;
- compiling said decisional rule to parse said condition;
- providing automatic and continuing iterative evaluations of whether said condition is fulfilled;
- automatically performing said task whenever said condition is fulfilled; and
- resuming further processing each time said condition is fulfilled.

3. A method for automatically executing a decisional rule containing a task and a condition containing a period of time which must be satisfied before the task can be performed and automatically performing the task every time the condition is fulfilled comprising:

entering said decisional rule into computing means;

compiling said decisional rule to parse said condition;

providing automatic and continuing iterative evaluations of whether said condition is fulfilled;

automatically performing said task every time said time period is satisfied; and

resuming processing each time said task is performed.

4. A method for automatically executing a decisional rule containing a task and a condition which must be fulfilled before the task can be performed and for automatically performing the task whenever the condition is fulfilled comprising:

entering said decisional rule into computing means;  
compiling said decisional rule to parse said condition;

providing automatic and continuing iterative evaluations of whether said condition is fulfilled;

determining whether the status of said condition has changed ~~from~~ between each said iterative evaluation;

automatically performing said task whenever both said condition is fulfilled and said status has changed;  
and

resuming processing each time both said condition is fulfilled and the status of said condition has changed.

5. A system for automatically evaluating a decisional rule containing a task and a condition which must be fulfilled before the task can be performed and automatically performing the task when the condition is fulfilled comprising:

computing means including compiler means and executor means responsive to said compiler means; and

means to enter one or more said decisional rules into said computing means, said decisional rule containing a condition and a task to be performed when said condition is fulfilled,

said compiler means including parsing means for isolating said condition and further including means for determining whether evaluations of said condition are to continue after said condition is fulfilled once;

said executor means including means for providing automatic and continuing iterative evaluations of whether said condition is fulfilled.

6. The system of claim 5 in which said executor means further includes means for performing said task when said condition is fulfilled.

7. The system of claim 5 in which said executor means further includes means for performing said task whenever said condition is fulfilled.

8. The system of claim 5 in which said executor means further includes means to assess, for each iterative evaluation of said condition, whether said condition has changed from a status of fulfilled to not fulfilled.

9. The system of claim 8 in which said executor means further includes means for performing said task whenever both said condition is fulfilled and said condition has changed.

Sub F2

10. A method for automatically evaluating a decisional rule containing a task and a condition which must be fulfilled before the task can be performed and for automatically performing the task when the condition is fulfilled comprising:

combining sequences of statements including decisional rules into bundles;

entering said bundles into computing means;

compiling each said decisional rule to parse said conditions to determine for each decisional rule whether evaluations of said decisional rule are to continue after said condition associated with each said rule is fulfilled once; and

providing automatic and continuing iterative evaluations of whether said conditions are fulfilled.

11. The method of claim 10 further including processing each said sequence in parallel.

12. The method of claim 11 further including processing said statements of each said sequence serially.

13. The method of claim 12 further including halting processing of said statements upon the occurrence of a decisional rule.

14. The method of claim 13 in which said iterative evaluations continue only until said condition associated with said decisional rule is fulfilled once and in which processing is resumed after said condition is fulfilled once.

15. The method of claim 13 in which said processing is resumed every time said condition is fulfilled.



Sub F-3

16. A method for automatically processing a series of statements including commands which automatically halt further processing until a condition associated with each commands is fulfilled comprising:

C                      entering a sequence of <sup>when/then</sup> statements including one or more control commands each containing a condition into processing means;

                         processing each statement sequentially in said sequence;

                         halting processing of said statements upon the occurrence of a said control command;

                         automatically and continuously providing iterative evaluations of whether said condition associated with said control is fulfilled; and

                         resuming processing of the remainder of said statements in said sequence only upon the fulfillment of said condition associated with said control command.

17. The method of claim 16 further including determining whether iterative evaluations of said condition associated with each said control command are to continue after the remainder of said statements are processed.

Sub F4

18. A system for automatically processing a series of statements including commands which automatically halt further processing until a condition associated with each command is fulfilled comprising:

input means for entry of a sequence of statements including one or more control commands each containing a condition;

compiler means, responsive to said input means, for recognizing the input of said control commands;

processor means, responsive to said compiler, for sequentially processing each said statement;

means, responsive to said compiler means and said processor means, for halting processing of said statements upon the occurrence of a said control command;

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~~means for automatically and continuously providing~~  
iterative evaluations of whether said condition associated with said control command is fulfilled; and

means to resume processing of the remainder of said statements in said sequence only upon the fulfillment of said condition associated with said control command.

19. The system of claim 18 in which said compiler means further include means for determining whether iterative evaluations of said condition associated with each said control command are to continue after processing of the remainder of said statements in said sequence resumes.

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